Arizona's Instrument to Measure Standards (AIMS)

Grade 3
Writing, Reading, and Mathematics

Released Items

January 7, 2008

As part of Superintendent Tom Horne's ongoing efforts to improve the communication of academic expectations, the Arizona Department of Education is releasing AIMS DPA Grades 3 through 8 writing, reading, and mathematics items to the public. This release is intended to provide students, parents, teachers, and the community with specific examples of the types of skills being assessed on the AIMS tests. The release begins with writing, followed by reading and mathematics, similar to the AIMS tests.

Included in this release is a previous writing prompt and directions used in the AIMS assessments. Following the writing prompt section are a reading passage, directions, and the items associated with the passage in the form of a mini-test. This passage and related items are from the 2005 and 2006 AIMS administrations. At the conclusion of the reading section, the individual items are presented again with the correct answers and statistical information about each item.

The final section consists of ten mathematics items from the 2006 and 2007 AIMS administrations in the form of a mini-test. At the conclusion of the mathematics section, the individual items are presented again with the correct answers and statistical information about each item.

The statistical information includes:
   1) item identification number;
   2) correct answer;
   3) response probability (P-Value), which represents the percentage of students who answered the question correctly;
   4) Rasch difficulty, which measures the difficulty of the item on a scale in which -3 indicates a very easy item and +3 indicates an extremely difficult item; and
   5) performance objective that the item aligns to in the 2003 standards.

The items are reproductions of the actual items as they appeared on the AIMS tests. If you have any questions, please contact Frank Brashear, Director of Test & Item Development, at (602) 542-5031.

WRITING

WRITING

Writing

Directions: Read the writing prompt below. In your writing draft booklet, use the prewriting and planning space for notes, lists, webs, outlines, and anything else that might help you plan your writing. Then write your draft on the draft pages of your draft booklet.

> You are in the classroom with your teacher and classmates. A bird flies in the window and can't find its way out.
>
> Write a story that tells what happens.

Your writing should:

- have a beginning, a middle, and an end
- describe the bird and the setting
- include important details about what happens

Remember to edit for spelling, grammar, punctuation, and capitalization.

Go On ➡

WRITING

DIRECTIONS: Use the prewriting and planning space below for notes, lists, webs, outlines, and anything else that might help you plan your writing.

Prewriting and Planning

Go On ➡

DIRECTIONS: **Write your draft on the lines below. Look back at your ideas on your prewriting and planning space. You do not have to use all the lines in this booklet. Just write on as many as you need.**

Draft Page

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Go On ➡️

Draft Page

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Go On ➡

WRITING

DIRECTIONS: Now you are going to revise your draft. Read your draft, then use the questions in the Writer's Checklist as a guide to make your changes. Check each box if you can answer "yes" to that question.

Writer's Checklist

Are my ideas clear?

Does my writing have words that make it interesting?

Does my writing have a clear beginning, middle, and ending?

Does my writing sound right and make sense?

Did I edit for capital letters?

Did I edit for correct punctuation?

Did I edit for correct spelling?

If you left any box in the checklist blank, think about ways to make your writing better.

DIRECTIONS: For each box you did not check, make a change on your draft. Then write your final copy in your Test Book/Answer Document.

READING

Directions: **Read the article. Then answer Numbers 1 through 9.**

LEXILE: 670L

African Mud Cloth

In African countries, artists use mud to paint on fabric and clothing. They collect the mud, cover it with water, and store it in a pot. They let the mixture sit for about one year. African artists use a dye made from boiled leaves to draw their designs. Then they use the mud paint to fill in the design.

For a faster way to make mud paint, follow these easy directions. Then you can design and make your own African mud cloth.

You will need:

- a table

- newspapers

- a wire mesh strainer

- 1 small coffee can

- $\frac{1}{2}$ c. of dirt

- $\frac{1}{2}$ c. of water

- a spoon

- $\frac{1}{2}$ c. of brown tempera paint

- $\frac{1}{2}$ c. of blue tempera paint

- a piece of heavy white cotton cloth about 24 inches long by 36 inches wide

- a pencil

- a paintbrush or a sharp twig

Go On ➡️

Here is what you do:

Take all the supplies outside. Lay several layers of newspaper on the table. This will prevent any spills and drips from getting on the table. Place the supplies on the table.

To make the mud, start by placing the strainer on top of the coffee can. Pour the dirt into the strainer. Slowly, pour the water over the dirt. Use the spoon to break up any large pieces of dirt. Make sure that all of the wet dirt goes through the strainer. Remove the strainer and anything left in it.

There will be a layer of water on top of the mud. Carefully, pour the water onto the ground. The mud should remain in the bottom of the coffee can.

Mix the blue paint and the brown paint with the mud. Stir the mixture with the spoon.

Now it is time to design your cloth. African artists use animals such as turtles, monkeys, and lizards in their designs. Lay the cloth on the newspaper. Draw your design on the cloth with a pencil. Use a paintbrush or twig to spread the mud paint onto the design on the cloth.

Let the mud paint dry and then add a second coat of mud paint on top of the first. Let the cloth dry completely. When the cloth is dry, shake off the extra mud. Display your African mud cloth!

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1. Why do people in African countries put mud on cloth?

   ○ to cover dirty marks

   ○ to separate the colors

   ○ to paint animal designs

   ○ to make the cloth one color

Go On ➡

2. When do you mix the blue and brown paints?

○ after letting the cloth dry completely

○ when you lay the cloth on the newspaper

○ after pouring water off the top of the mud

○ when you use a twig to spread the mud paint

3. Which sentence from the first paragraph is the topic sentence?

○ Then they use the mud paint to fill in the design.

○ They collect the mud, cover it with water, and store it in a pot.

○ In African countries, artists use mud to paint on fabric and clothing.

○ African artists use a dye made from boiled leaves to draw their designs.

4. Read this sentence from "African Mud Cloth."

Let the cloth <u>dry</u> completely.

If -<u>es</u> is added to the word <u>dry</u>, what is the correct way to spell the new word?

○ dries

○ dryes

○ dryses

○ dryies

Go On

5. Which source would be **best** to find the meaning of the word <u>design</u>?

    ○ an atlas

    ○ an almanac

    ○ a thesaurus

    ○ a dictionary

6. Which two colors of paint do you need to make an African mud cloth?

    ○ green and blue

    ○ brown and blue

    ○ green and brown

    ○ yellow and brown

7. Which direction is **not** given in the article?

    ○ Put your supplies away.

    ○ Stir the mixture with a spoon.

    ○ Pour the water onto the ground.

    ○ Use the spoon to break up the pieces of dirt.

Go On ➡

8. Read this sentence from "African Mud Cloth."

Take all the supplies outside.

Which word in this sentence tells where something should go?

○ all
○ outside
○ supplies
○ take

9. Read this sentence from "African Mud Cloth."

Slowly, pour the water over the dirt.

In which word does -ly have the same meaning as it does in the word slowly?

○ butterfly
○ family
○ loudly
○ only

Item	Reading Item Data
1	

Item Number	3301654	Correct Answer	3rd	P-Value	.54	Equated Rasch Value	0.7213

2003 Reading Standard Alignment is Strand **3** – Concept **1** – Performance Objective **2**

Why do people in African countries put mud on cloth?

○ to cover dirty marks

○ to separate the colors

○ to paint animal designs

○ to make the cloth one color

	Reading Item Data
2	

Item Number	3301656	Correct Answer	3rd	P-Value	.54	Equated Rasch Value	0.7202

2003 Reading Standard Alignment is Strand **3** – Concept **2** – Performance Objective **1**

When do you mix the blue and brown paints?

○ after letting the cloth dry completely

○ when you lay the cloth on the newspaper

○ after pouring water off the top of the mud

○ when you use a twig to spread the mud paint

	Reading Item Data
3	

Item Number	3301643	Correct Answer	3rd	P-Value	.69	Equated Rasch Value	0.0455

2003 Reading Standard Alignment is Strand **1** – Concept **1** – Performance Objective **2**

Which sentence from the first paragraph is the topic sentence?

○ Then they use the mud paint to fill in the design.

○ They collect the mud, cover it with water, and store it in a pot.

○ In African countries, artists use mud to paint on fabric and clothing.

○ African artists use a dye made from boiled leaves to draw their designs.

4	Reading Item Data							
	Item Number	3301644	Correct Answer	1st	P-Value	.69	Equated Rasch Value	-0.1270
	2003 Reading Standard Alignment is Strand **1** – Concept **3** – Performance Objective **3**							

Read this sentence from "African Mud Cloth."

Let the cloth <u>dry</u> completely.

If -<u>es</u> is added to the word <u>dry</u>, what is the correct way to spell the new word?

○ dries

○ dryes

○ dryses

○ dryies

Item	Reading Item Data							
5	Item Number	3301655	Correct Answer	4th	P-Value	.65	Equated Rasch Value	0.6471
	2003 Reading Standard Alignment is Strand **3** – Concept **1** – Performance Objective **4**							

Which source would be **best** to find the meaning of the word <u>design</u>?

○ an atlas

○ an almanac

○ a thesaurus

○ a dictionary

6	Reading Item Data							
	Item Number	3261892	Correct Answer	2nd	P-Value	.84	Equated Rasch Value	-1.0598
	2003 Reading Standard Alignment is Strand **3** – Concept **1** – Performance Objective **2**							

Which two colors of paint do you need to make an African mud cloth?

○ green and blue

○ brown and blue

○ green and brown

○ yellow and brown

7

Reading Item Data

Item Number	3261891	Correct Answer	1st	P-Value	.68	Equated Rasch Value	0.0921

2003 Reading Standard Alignment is Strand **3** – Concept **2** – Performance Objective **3**

Which direction is **not** given in the article?

- ○ Put your supplies away.
- ○ Stir the mixture with a spoon.
- ○ Pour the water onto the ground.
- ○ Use the spoon to break up the pieces of dirt.

8

Reading Item Data

Item Number	3301645	Correct Answer	2nd	P-Value	.71	Equated Rasch Value	-0.1314

2003 Reading Standard Alignment is Strand **1** – Concept **3** – Performance Objective **6**

Read this sentence from "African Mud Cloth."

Take all the supplies outside.

Which word in this sentence tells where something should go?

- ○ all
- ○ outside
- ○ supplies
- ○ take

9

Reading Item Data

Item Number	3301646	Correct Answer	3rd	P-Value	.46	Equated Rasch Value	1.1034

2003 Reading Standard Alignment is Strand **1** – Concept **4** – Performance Objective **2**

Read this sentence from "African Mud Cloth."

Slowly, pour the water over the dirt.

In which word does -ly have the same meaning as it does in the word slowly?

- ○ butterfly
- ○ family
- ○ loudly
- ○ only

MATHEMATICS

Mathematics

DIRECTIONS: Read each question and choose the best answer.

1. Ben has the four shape cards shown below.

STAR   STAR   STAR   MOON

He asks Jill to close her eyes and take one card. Which sentence **best** tells what will happen?

○ Jill is more likely to pick a star card.

○ Jill is more likely to pick a moon card.

○ Jill is equally likely to pick a star card or a moon card.

○ Jill is less likely to pick a star card.

2. What number goes in the box to make this number sentence true?

$$\boxed{} - 6 = 12$$

○ 6

○ 12

○ 18

○ 20

Go On ➡

3. What is the solution to the following?

$$\begin{array}{r} 966 \\ - 357 \\ \hline \end{array}$$

- ○ 609
- ○ 611
- ○ 619
- ○ 621

4. Abby, Zach, and Beth had a jump rope contest at recess. The chart below shows the length of time each child jumped without missing a step.

Jump Rope Contest

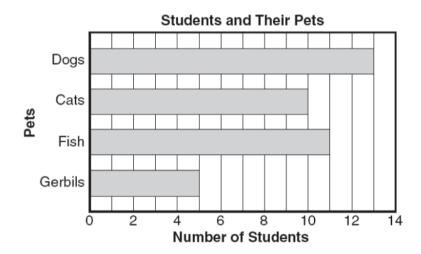| Child	Time (in minutes)
Abby	6
Zach	7
Beth	6

Based on this information, which of these statements is true?

- ○ Abby is a champion at jump rope.
- ○ Beth jumped rope longer than Abby or Zach.
- ○ All 3 children can jump rope for more than 5 minutes.
- ○ Zach jumped rope for more minutes than the other two jumped together.

Go On

5. Lori counted her marbles by 4 to make a number pattern.

4, 8, 12, 16
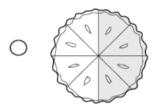
Which of these number patterns uses the same rule?

○   16, 18, 20, 22

○   16, 19, 20, 21

○   16, 20, 24, 28

○   16, 22, 24, 26

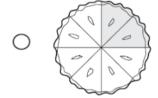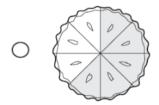**6.** The bar graph below shows the number of pets some students have.

Students and Their Pets

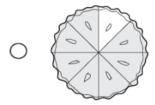Based on the graph, how many **more** students have dogs than gerbils?

○   5

○   8

○   9

○   13

Go On ➡

7. Marcus collected 2,764 pennies. Which of the following shows 2,764 written in words?

○   two thousand seven hundred four

○   two thousand seven hundred forty-six

○   two thousand seven hundred sixty-four

○   two thousand seven hundred sixteen four

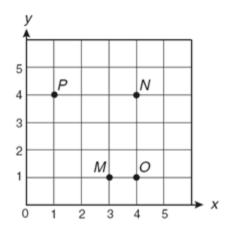**8.** Joe's family had pie for dessert. Which figure below shows that $\frac{1}{2}$ of the pie was eaten?

○

○

○

○

Go On ➡

9. Kelly earned $6.75 for dog sitting and $11.75 for babysitting. What was the total amount Kelly earned?

○ $17.25

○ $17.50

○ $18.25

○ $18.50

10. Which point is located at (4, 1) on the coordinate grid?

○   M

○   N

○   O

○   P

Item	Mathematics Item Data							
1	Item Number	3148180	Correct Answer	1st	P-Value	.82	Equated Rasch Value	-0.7407
	2003 Mathematics Standard Alignment is Strand **2** – Concept **2** – Performance Objective **2**							

Ben has the four shape cards shown below.

STAR STAR STAR MOON

He asks Jill to close her eyes and take one card. Which sentence **best** tells what will happen?

○ Jill is more likely to pick a star card.
○ Jill is more likely to pick a moon card.
○ Jill is equally likely to pick a star card or a moon card.
○ Jill is less likely to pick a star card.

Item	Mathematics Item Data							
2	Item Number	3260774	Correct Answer	3rd	P-Value	.79	Equated Rasch Value	-0.2688
	2003 Mathematics Standard Alignment is Strand **3** – Concept **3** – Performance Objective **2**							

What number goes in the box to make this number sentence true?

$$\boxed{} - 6 = 12$$

○ 6
○ 12
○ 18
○ 20

Item	Mathematics Item Data							
3	Item Number	3260653	Correct Answer	1st	P-Value	.73	Equated Rasch Value	-0.2558
	2003 Mathematics Standard Alignment is Strand **1** – Concept **2** – Performance Objective **3**							

What is the solution to the following?

$$\begin{array}{r} 966 \\ - 357 \\ \hline \end{array}$$

○ 609
○ 611
○ 619
○ 621

4	Item Number	3260735	Correct Answer	3rd	P-Value	.58	Equated Rasch Value	0.8973

2003 Mathematics Standard Alignment is Strand **5** – Concept **1** – Performance Objective **1**

Abby, Zach, and Beth had a jump rope contest at recess. The chart below shows the length of time each child jumped without missing a step.

Jump Rope Contest

Child	Time (in minutes)
Abby	6
Zach	7
Beth	6

d on this information, which of these statements is true?

○ Abby is a champion at jump rope.

○ Beth jumped rope longer than Abby or Zach.

○ All 3 children can jump rope for more than 5 minutes.

○ Zach jumped rope for more minutes than the other two jumped together.

5	Item Number	3279050	Correct Answer	3rd	P-Value	.72	Equated Rasch Value	-0.1558

2003 Mathematics Standard Alignment is Strand **3** – Concept **1** – Performance Objective **1**

Lori counted her marbles by 4 to make a number pattern.

4, 8, 12, 16

Which of these number patterns uses the same rule?

○ 5, 18, 20, 22

○ 5, 19, 20, 21

○ 5, 20, 24, 28

○ 5, 22, 24, 26

6	Item Number	3278056	Correct Answer	2nd	P-Value	.60	Equated Rasch Value	0.7849

2003 Mathematics Standard Alignment is Strand **2** – Concept **1** – Performance Objective **4**

The bar graph below shows the number of pets some students have.

Students and Their Pets

on the graph, how many **more** students have dogs than gerbils?

○ 5

○ 8

○ 9

○ 13

7	Item Number	3258383	Correct Answer	3rd	P-Value	.80	Equated Rasch Value	-0.9148
	2003 Mathematics Standard Alignment is Strand **1** – Concept **1** – Performance Objective **1**							

Marcus collected 2,764 pennies. Which of the following shows 2,764 written in words?

○ two thousand seven hundred four

○ two thousand seven hundred forty-six

○ two thousand seven hundred sixty-four

○ two thousand seven hundred sixteen four

8	Item Number	3148340	Correct Answer	1st	P-Value	.71	Equated Rasch Value	0.6554
	2003 Mathematics Standard Alignment is Strand **1** – Concept **1** – Performance Objective **10**							

Joe's family had pie for dessert. Which figure below shows that $\frac{1}{2}$ of the pie was eaten?

9	Item Number	3139135	Correct Answer	4th	P-Value	.74	Equated Rasch Value	0.4433

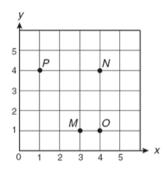2003 Mathematics Standard Alignment is Strand **1** – Concept **2** – Performance Objective **17**

Kelly earned $6.75 for dog sitting and $11.75 for babysitting. What was the total amount Kelly earned?

○ $17.25
○ $17.50
○ $18.25
○ $18.50

10	Item Number	3277702	Correct Answer	3rd	P-Value	.66	Equated Rasch Value	0.2132

2003 Mathematics Standard Alignment is Strand **4** – Concept **3** – Performance Objective **1**

Which point is located at (4, 1) on the coordinate grid?

○ M
○ N
○ O
○ P